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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,616	12/08/2003	Mitchell Darwin Lambert	10286.0366.NPUS00	4034

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EXAMINER

STEPHENSON, DANIEL P

ART UNIT PAPER NUMBER

3672

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/730,616

Applicant(s)

LAMBERT ET AL.

Examiner

Daniel P. Stephenson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-17, 19-26, 28-33, 35-38 and 40 is/are rejected.
- 7) ☒ Claim(s) 8, 18, 27, 34 and 39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/4/04, 7/15/05
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claim 16 is objected to because of the following informalities: it has an improper dependency. It is dependent from claim 10 when it should be dependent from claim 15.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4, 5, 10-13, 15, 19-21, 23, 24, 28-31, 35 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Sudol '545. Sudol '545 (Fig. 1 and 6) discloses a method of cleaning a wellbore wherein a jet pump is positioned in a wellbore. The jet pump has a nozzle and a throat. A power fluid is pumped through the jet pump and it is stated that cavitation may occur (col. 6 lines 56-60) at the outlet of the nozzle. If cavitation were to occur between the nozzle and the throat the power fluid would inherently be at a pressure that is lower than the vapor pressure of the power fluid. Solids-laden wellbore fluid is drawn into the jet pump and mixed with the power fluid. Since the mixing occurs between the nozzle and the throat it would naturally take place when the power fluid is at a pressure that is lower than the vapor pressure of the power fluid. The mixture is transported through the throat and up to the surface. The jet pump is attached to coil-in-coil tubing.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sudol '545. Sudol '545 shows all the limitations of the claimed invention, except it does not explicitly disclose that the power fluid is pumped at a sufficient velocity to cause the power fluid pressure in the throat to be lower than the vapor pressure of the power fluid, i.e. cavitating. It would have been obvious to one of ordinary skill in the art at the time the invention was made to note that cavitation would proceed into the throat of the jet pump- of Sudol '545. This would occur because the throat of the jet pump (Figure 6), has a much larger diameter than the outlet of the nozzle for the power fluid. Thus the power fluid would not necessarily have the pressure raised enough by the reduced diameter to allow for the vapor pressure to be offset.
6. Claims 6, 7, 9, 14, 16, 17, 25, 26, 32, 33, 37, 38 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sudol '545 in view of Bergren et al. Sudol '545 shows all the limitations of the claimed invention, except it does not disclose what the power fluid used in the jet pump is nor does it disclose that the jet pump can be configured so that the power fluid flows through the center tubing while the mixture flows back up through the annulus between the tubings. Bergren et al. (Fig. 1 and 6, col. 7 lines 16-35) discloses a jet pump system that has a coiled tubing within a production tubing and allows for the pumping of a power fluid (brine or water) through the middle tubing and allows the mixture fluid to flow back to the top of the

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system through the annulus between the two tubings. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the jet pump system of Bergren et al with the coiled tubing of Sudol '545. This would be done so because it is common knowledge in the art of jet pumps that they can either be configured so that the power fluid will flow through the middle of the system or through the annulus before reaching the pump. In addition water or seawater/brine is a common power fluid for use in jet pumps since it costs little in comparison with other fluids.

***Allowable Subject Matter***

7. Claims 8, 18, 27, 34 and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Akiyama et al. and Coleman both show similar elements to the present invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel P. Stephenson whose telephone number is (571) 272-7035. The examiner can normally be reached on 8:30 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Bagnell  
Supervisory Patent Examiner  
Art Unit 3672

DPS

